AMENDMENTS TO THE CLAIMS

1-5. (Cancelled)

6. (Currently amended) A method according to Claim ~~16~~ 17 wherein said certificate checker performs the following steps:
a) entering said authentication code into a computer;
b) entering information in the printed certificate into the computer;
c) causing the computer to cryptographically generate a check code from said information; and
d) causing the computer to compare said check code with said authentication code and to generate a warning indication if said check code does not correspond with said authentication code.

7. (Cancelled)

8. (Currently amended) A method according to Claim ~~7~~ 17 wherein said authentication authority cryptographically generates said authentication code using ~~cryptographic key is~~ a secret key known to both the authentication authority and said certificate checker, but not known to said test certificate producer.

9. (Currently amended) A method according to Claim ~~8~~ 17 wherein said authentication code is generated by performing a key-dependent one-way hash of said test information and said pre-printed information, using ~~said~~ a secret key.

10. (Currently amended) A method according to Claim ~~7~~ 17 wherein said authentication authority generates said authentication code using the private key of a public/private key pair, and wherein the certificate checker checks the authentication code using the public key of said public/private key pair.

11. (Currently amended) A method according to Claim ~~16~~ 17 wherein communication between said test certificate producer and said authentication authority is protected by encryption.

12 -16. (Cancelled)

17. (Previously presented) A method for producing and authenticating a printed test certificate comprising the following steps:
a) a test certificate producer performs a test and generates test information to be included in the test certificate;
b) the test certificate producer transmits said test information, and also pre-printed information read from a blank test certificate, to an authentication authority;
c) the authentication authority checks whether the test certificate producer is authorized to perform the test and, if so, cryptographically generates an authentication code from said test information and said pre-printed information, and sends the authentication code back to the test certificate producer;
d) upon receipt of the authentication code from the authentication authority, the test certificate producer prints both said test information and said authentication code on the blank test certificate; and
e) upon presentation of the printed test certificate for authentication, a certificate checker cryptographically checks the authentication code against said test information and said pre-printed information in the printed test certificate to determine whether the printed test certificate is authentic.

18. (Previously presented) A method according to Claim 17 wherein said pre-printed information is contained in a pre-printed bar code.

19. (Previously presented) A method according to Claim 18 wherein the test certificate producer uses a combined printer and bar-code scanner to read said pre-printed bar code and also to print said printed test certificate.

20. (Previously presented) A method for producing and authenticating a printed test certificate comprising the following steps:
a) a test certificate producer performs a test and sends information to be included in a test certificate to an authentication authority;
b) the authentication authority checks whether the test certificate producer is authorized to perform the test and, if so, cryptographically generates an authentication code from said information, and sends the authentication code back to the test certificate producer;

c) upon receipt of the authentication code from the authentication authority, the test certificate producer prints the test certificate, including both said information and said authentication code; and

d) upon presentation of the printed test certificate for authentication, a certificate checker cryptographically checks the authentication code against said information in the printed test certificate to determine whether the printed test certificate is authentic;

e) wherein the test certificate is printed on a blank test certificate which includes a pre-printed bar-coded serial number;

f) wherein the test certificate producer uses a combined printer and bar-code scanner to read said pre-printed bar-coded serial number from said blank test certificate and sends said pre-printed bar-coded serial number to said authentication authority;

g) wherein said authentication authority uses said pre-printed bar-coded serial number in generating said authentication code;

h) and wherein the test certificate producer uses the combined printer and bar-code scanner to print said information and said authentication code on to said blank test certificate, to form said printed test certificate.

21. (New) A method according to claim 17 wherein said pre-printed information comprises a serial number.